This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. - 21. (canceled)

22. (new) A stereomicroscope comprising:

a main objective;

an illumination source providing an illumination beam directed along an illumination axis;

a pair of lateral illumination sources each providing a lateral illumination beam directed along a respective lateral illumination axis;

a deflection prism arranged in the illumination axis for deflecting the illumination beam toward the main objective; and

a pair of lateral deflection elements on opposite sides of the illumination axis, one lateral deflection element in each of the lateral illumination axes, the pair of lateral deflection elements deflecting the lateral illumination beams toward the main objective; wherein the lateral illumination axes are non-parallel to the illumination axis (3).

- 23. (new) The stereomicroscope as defined in Claim 22, wherein the pair of lateral deflection elements are arranged directly adjacent to opposite sides of the deflection prism.
- 24. (new) The stereomicroscope as defined in Claim 22, wherein the light frequency of the lateral illumination beams is in the ultra-violet range.
- 25. (new) The stereomicroscope as defined in Claim 22, wherein the pair of lateral deflection elements and the deflection prism are not parts of a composite deflection element.
- 26. (new) The stereomicroscope as defined in Claim 23, wherein the pair of lateral deflection elements and the deflection prism are parts of a composite deflection element.

Appl. No. 10/764,315 Amendment and Response to Office Action Reply to Office Action of August 2, 2005

- 27. (new) The stereomicroscope as defined in Claim 22, wherein at least one of the pair of lateral deflection elements and the deflection prism has non-zero focal power.
- 28. (new) The stereomicroscope as defined in Claim 22, wherein the pair of lateral deflection elements and the deflection prism are replaceable to permit interchange with like elements of chosen focal power.
- 29. (new) The stereomicroscope as defined in Claim 22, wherein each of the pair of lateral deflection elements is a mirror.
- 30. (new) The stereomicroscope as defined in Claim 29, wherein each of the pair of lateral deflection elements is a concave mirror.
- 31. (new) The stereomicroscope as defined in Claim 22, wherein each of the pair of lateral deflection elements is a prism.
- 32. (new) The stereomicroscope as defined in Claim 22, wherein at least one of the lateral illumination axes extends in a direction approximately perpendicular to a direction of the illumination axis.
- 33. (new) The stereomicroscope as defined in Claim 32, wherein both of the lateral illumination axes extend in a direction approximately perpendicular to a direction of the illumination axis.